The reference persephin polynucleotide probe can comprise <u>a cDNA encoding the complete</u> mouse persephin open reading frame (SEQ ID NO:179, or the complement thereof, SEQ ID NO:180); a cDNA encoding the complete rat persephin open reading frame (SEQ ID NO:190 or the complement thereof, SEQ ID NO:191); cDNAs encoding complete human persephin open reading frames (SEQ ID NOS:203 or 205, or their respective complements, SEQ ID NOS:204 or 206) [SEQ ID NO:179 and the respective complement (SEQ ID NO:180), SEQ ID NO:190 and the respective complement (SEQ ID NO:191), SEQ ID NOS:203-206] or derivatives thereof or fragments thereof so long as such derivatives or fragments specifically hybridize to persephin mRNA or from a cDNA produced from a persephin mRNA.

IN THE FIGURES:

In the title to Figure 20b, "(SEQ ID NO:142)" has been replaced with --(SEQ ID NO:146)--.

Remarks

The preceding amendments and the following remarks are provided to clearly point out the appearance and descriptions of the SEQ ID NOs identified in the communication from the Examiner, pursuant to 37 CFR 1.821.

SEQ ID NO: 19- In the amendment put forth in paper number 12, on page 2, at line 17, SEQ ID NO:19 is identified as amino acids 20-95 of mouse neuturin, which is the pre-pro region of mouse neuturin.

SEQ ID NO: 102- In the specification, on page 101, at line 39, SEQ ID NO:102 is described as the reverse primer used to generate the 210 nucleotide DNA fragment from genomic DNA, which was used as a probe in subsequent experiments.



SEQ ID NOS:125-129- These sequences are first introduced in the specification, on page 3, at line 28. The amendment described herein should clarify that these sequences are short peptides, derived from persephin, to which degenerate primers are made.

SEQ ID NO:180- This sequence is cited in the specification-as-filed, on page 56, at line 12. In the amendment presented in this paper, SEQ ID NO:180 is clearly defined as the complementary sequence of a mouse cDNA, which encodes the persephin open reading frame.

SEQ ID NO:191- This sequence is cited in the specification-as-filed, on page 56, at line 12. In the amendment presented in this paper, SEQ ID NO:191 is clearly defined as the complementary sequence of a rat cDNA, which encodes the persephin open reading frame.

SEQ ID NO:206- This sequence is cited in the specification-as-filed, on page 56, at line 13. In the amendment presented in this paper, SEQ ID NO:206 is clearly defined as the complementary sequence of a human cDNA, which encodes the persephin open reading frame.

As per Examiner's recommendation, the specification has been amended to include SEQ ID NOS:141 and 146 in the "Brief Description of Drawings" section of the specification. Furthermore, the heading to Figure 20b has been amended to replace the SEQ ID NO:142 citation with a reference to SEQ ID NO:146. The citation of these sequence identification numbers in the body of the specification and the change in Figure 20b do not constitute new matter, since SEQ ID NO:141 is described on page 115 at lines 35-36 and SEQ ID NO:146 is described on page 116 at lines 32-33 of the application-as-filed.

Additionally, page 56 of the specification has been amended to clarify what exactly the "reference sequences" (SEQ ID NOS:179, 180, 190, 191 and 203-206) are. As the sequences were already disclosed in the sequence listing of the application-as-filed, the clarification of the references in the body of the text does not constitute new matter.

In view of the amendments and remarks presented above, it is believed that applicants have complied with all of the issues presented in paper number 14, and with the requirements of 37 C.F.R. §§1.821-1.825.

Respectfully submitted.

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April 2, 2001